

forming a thin film structure over the first surface of the substrate, the thin film structure including a heating element and an orifice layer that defines a firing chamber disposed over the heating element;

forming a second fluid channel through the thin film structure;  
and

fluidically coupling the first fluid channel with the firing chamber via the second fluid channel;

wherein the first fluid channel substantially extends from the interface to the second fluid channel, and is substantially located between the thin film structure and a recessed surface of the substrate.

8. (new). The method of claim 7 wherein the first fluid channel includes a refill channel.

9. (new). A method of manufacturing a print cartridge comprising:  
forming a thin film structure over an outer surface of a substrate, wherein the substrate has an interface between a fluid reservoir of the print cartridge and the substrate, wherein the thin film structure has a heating element and an orifice layer that defines a firing chamber disposed over the heating element;

fluidically coupling a first fluid channel of the substrate with the fluid reservoir;

disposing a second fluid channel through the thin film structure;  
and

fluidically coupling the first fluid channel with the firing chamber via the second fluid channel, wherein the first fluid channel substantially extends from the interface to the second fluid channel, and is substantially located between the thin film structure and a recessed surface of the substrate.

10. (new). The method of claim 9 wherein the first fluid channel includes a refill channel.

11. (new). A method of manufacturing a print cartridge comprising:

forming a thin film structure over a first outer surface of a substrate, wherein the substrate has an interface between a fluid reservoir of the print cartridge and the substrate, wherein the thin film structure has a heating element and an orifice layer that defines a firing chamber disposed over the heating element;

fluidically coupling a first fluid channel of the substrate with the fluid reservoir via a second outer surface of the substrate that is arranged in a non-parallel manner with said first outer surface;

disposing a second fluid channel through the thin film structure;  
and

fluidically coupling the first fluid channel with the firing chamber via the second fluid channel, wherein the first fluid channel substantially extends from the interface to the second fluid channel, and is substantially located between the thin film structure and recessed surface of the substrate.

<sup>12</sup>  
X (new). The method of claim <sup>11</sup> ~~6~~ wherein the first fluid channel includes a refill channel.

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